General Assembly - 12th October 2017
'Towards a Joint Investment Programme for Smart Cities'

MARKETPLACE BREAKFAST

The EIP-SCC General Assembly kicked off with an informal Marketplace Breakfast (from 8.30 – 10.00am), involving 160 people representing industry, cities, and investor communities, and addressing 17 different topics.
The purpose was to agree practical actions that will accelerate the financing at scale of bankable smart city projects.

Marketplace Breakfast

Marketplace Breakfast Objectives
1. For cities, industry, investors and other players with experiences in investing in Smart Cities solutions to meet and share their interests, views and businesses
2. Consolidate some well-advanced opportunities in terms of moving them closer to the market and certainly understanding what steps will shift these to action in the market
3. Deliver practical next steps that can accelerate the financing of projects at scale

Table Themes

17 tables topics were identified, that address specific city infrastructures and services; as well as vital enabling actions. These themes are colour-coded below in groups where they relate to the EIP Action Clusters (SUM; SD&BE; II&P; C-F; BM&F; IP&P)

1. New Mobility Services
2. Intelligent mobility for energy transition
3. Urban Air Mobility
4. EV4SCC
5. Alternative Fuels Special Vehicles
6. Deep retrofitting – an immediate need
7. Positive Energy Blocks – the Roadmap
8. The Humble Lamppost – maximising value from city assets
9. GDPR – securing data for Smart Cities
10. Urban Data Platforms
11. Societal Engagement Tools for Cities
12. Urban EU-China Initiative
13. Packaged solutions for scale replication
14. The role of Structural Funds to stimulate Blending of Finances
15. Building Confidence & Smart City Roadmap
16. The Role of National & Regional Gov't to stimulate market
17. Participatory Budgeting for Inclusive Smart Cities and Communities

Table Discussion Process

Specific roles were set to structure and support a productive discussion

| Chair	Facilitator	Expert(s)
• 'Owns' the discussion and is accountable to ensure solid output • Ensures balanced contribution	• Ensure the template is legibly completed as a final output (& may use flip chart to help capture additional and 'in-process' points / diagrams • Checks with chair and participants to ensure points are adequately captured	• Tables may have 1-2 experts on the subject, invited early on to elaborate on key points

Generic Agenda
- Chair briefly introduces the Topic; Key Roles; and desired Output
- 'Tour de Table' introduction
- Expert(s) pick up on the Chair's points and add colour, context, examples, ideas

- Chair, Expert(s), & Facilitator stimulate discussion and steer towards specific output. (i.e. new projects; specific follow-up actions; key challenges etc)
- Chairs (with help of Facilitator) reviews the Template content with participants

Output Template

A common template captured key points from the discussion:

- **Principal Ideas & Outcomes from the Discussion**

- **Challenges to Overcome to Stimulate Cross-Sector Collaboration & Scale Investment**

- **Practical Next Steps**
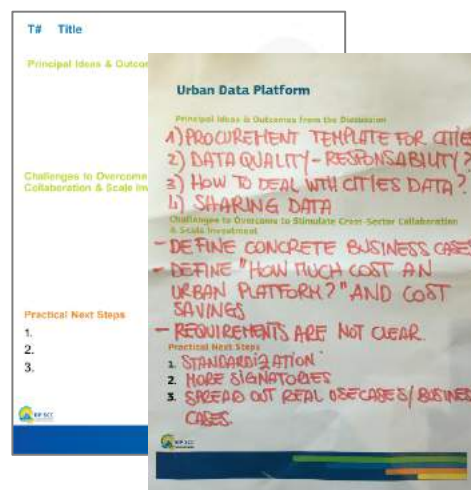
Common Themes Emerging

A number of common messages emerge from most table discussions. These are not new; however, they present vexing challenges, needs, and opportunities for the market to address:

- Financing – of good ideas to get them established; and of scale implementations
- ROI / Business Models – demonstrating financial attractiveness of solutions, and constructing (innovative) business models that make solutions work, at scale
- Alignment of financing – between multiple types of investor
- Use Cases – the need for very practical examples to engage and communicate
- Value Chain Mapping – of the steps in the chain and actors involved, to support new thinking
- Interoperability / harmonisation of solutions – open solutions that can be easily replicated
- Guidance & Standards – much exists; application will build confidence and de-risk solutions
- 'Convening' – city hall, governments, and investors can all play important roles to condition the market and incentivise greater productivity
- Demand Aggregation – an opportunity to achieve economies of scale, and certainty
- Inclusiveness – geographically, and in terms of city size (not leaving small cities behind)
- Knowledge – capture sharing, and capacity building
- The need to work across silos – within sector and across sectors / professions
- Mindset change that is required

Table Specific Capture

The following pages provide more detailed notes for each of the 17 tables.

Forward Plans

These notes will be built into Action Cluster / Initiative roadmaps, and the more common or priority ones will be incorporated into the "Towards a Joint Investment Programme for European Smart Cities"

Table 1: New Mobility Services

How to boost the collaboration between local & regional governments and the private sector for the purpose of large scale deployment of New Mobility Services? (level 4 autonomous driving in the urban area, including on demand services) What are lessons learned in building 'multi stakeholder real life test bed environments for deployment'?

Chair	Facilitator	Experts / M'Pl ace
Edwin Mermans	Marije Tamara Goldsteen	Stephanie Leonard MOVE B4

text.

Table 2: Intelligent mobility for energy transition

Innovative technologies and services applied to electromobility will have a significant impact on the urban energy systems. What kind of pilots can we deploy together to enable, demonstrate and enhance the benefits of this impact?

Chair	Facilitator	Experts / M'Pl ace
Noemi Moya	Anna Domenech	Michel Christian Laubenheimer

text.

Table 3: Urban Air Mobility

SMART MOBILITY in SMART CITIES: WALK. RIDE. DRIVE. FLY. 'How do you want to commute today?' The Urban Air Mobility Initiative aims to bring together the relevant communities to jointly work on the definition of a deployment strategy and roadmap for the next generation of urban mobility featuring the air dimension.

Chair	Facilitator	Experts / M'Pl ace
Enno Schumacher	Vassilis Agouridas	Michael Mazur

Urban Air Mobility (UAM) today is neither a fiction nor an unreached dream; it is ever becoming a reality allowing the delivery of visionary total urban mobility solutions. While UAM is getting technologically ready, its successful market uptake still requires setting up the corresponding regulatory and urban planning frameworks (UTM/U-Space, cybersecurity, multimodal hubs hosting 'landing pads', etc.). Such frameworks are prerequisite to achieve safe, secure and sustainable urban transport operations, and consequently build the necessary public trust and acceptance.

The UAM Initiative aims to bring urban mobility in the third dimension – the air (airborne vehicles). Key to the success of the UAM Initiative is to find smart cities (or clusters of cities), industrial partners and investors and who are ready to nurture and mature various aspects of this new form of mobility service. Therefore, Airbus is keen to engage with key stakeholders, including amongst others candidate cities and local municipalities, regulators and urban planners, and transport authorities, to elaborate on city-tailor-made total urban mobility solutions that include air transport and allow for truly a integrated, service-driven, multi-modal transport system. In that sense, Airbus welcomes the opportunity of creating a network of stand-alone demonstrators (city pilots) which should be part of the Helsinki declaration.

Early analysis shows that benefits of UAM clearly outweigh the associated challenges:

Benefits
- reduce traffic congestion + emissions
- address social needs (e.g. medical assistance)
- satisfy social expectations for more efficient + convenient transport

Challenges
- address public acceptance
- ensure safe autonomous flight
- reduce the impact from noise and visual pollution

The UAM Initiative envisages to deal with the following **key topics**:
- Synergies among urban planners, public transport and infrastructure providers;

- Insertion and integration of UAM into the wider transport ecosystem through multi-modality and mobility as a service;
- Cooperation with diverse stakeholders: municipalities, regions, regulators, public and private investors, operators, insurance, legal, real estate, citizen networks;
- Investments according to the specific requirements of each city

Practical Next steps:

1. Build multi-stakeholder core UAM Community: including smart cities, transport and regulatory actors and stakeholders
2. Elaborate total urban mobility solution projects featuring UAM that are addressing specific city needs; no one-fits-all approach
3. Run pilots in EU cities to demonstrate requirements for the gradual integration of UAM in transport systems.

Table 4: eV4SCC eVehicles for smart cities and communities / eMaaS (eMobility as a Service)

Electric Vehicles for Smart Cities and Communities. A public private partnership supporting the creation of new projects which will focus on one of the key market segments. Focus on four workstreams; e-freight, e-bus, e-fleet, e-planning and smart charting. How do we mobilize a Europe-wide dialogue on the potential for electric vehicles to be integrated with smart city initiatives?

Chair	Facilitator	Experts / M'Pl ace
Jason Warwick	Christian Gürtler	Alain Van Gaever; Linda Van Duivenbode

Principal Ideas and Outcomes from the Discussion

Goals
- collaborating with manufacturers & operators
- on the modernization of fleets (gradual replacement)

Are autonomous electric buses an eMaaS component?
- Not now because too expensive compared to fossil-fuelled buses
- But might be in combination with other components
- Especially to cover rural areas

Charging is an integral part of eMaaS
- Inductive charging is most convenient & the future but still challenging (public space required)

Requirements are different from country to country
- Local constraints & regulations
- Highly dependent on city size
- Larger cities are easier
- Organizational structure in cities need to change to enable eMaaS
- Harmonization needed (both technological & organizational)
- Stricter regulations (regarding emissions, parking etc.) needed to boost e-delivery & collective transport

Networking is key to deliver a concrete project

Challenge: Finding the "right" financing instrument

- Many cities etc. don't know about available instruments
- Also true for many companies with project ideas

eMaaS for Consumers

This already exists
- Denmark
    - o carsharing, bike sharing, public transport
    - o e-carsharing is only an option for distances < 100 km
    - o one platform for all options
    - o Experience: cars are used less when there is an alternative, **convenient payment is key enabler**
    - o Common definition for MaaS might be needed including value chain
- **Private users might not be the target group to scale eMaaS**

eMaaS for Corporate users

Autolib' is already used by corporations in France

Practical Next Steps
1. EV4SCC should work as a facilitator to bring together projects & financing
2. Collect different projects & services (success stories) and feed them into CIVITAS (marketplace) to reduce redundancies
3. EV4SCC could offer a sort of "board" to bring together different stakeholders (from concrete successful projects) for knowledge exchange (comparable to KIC)
4. Define a value chain for eMaaS
5. Increase the visibility of EV4SCC (unknown to many) together with internal structural improvements
6. Follow up on the many EV4SCC projects & activities to foster the transition to EVs (by replication)

Table 5: eMaaS (eMobility as a Service)

Decisions surrounding selection of most appropriate technologies to power special vehicles for use within our cities has become very complex: different applications, power options, infrastructure requirements and technologies. How to make the right decisions to create a safe, sustainable, cost effective, integrated and reliable solution that meets the zero emission targets in the prescribed timescales? A guideline outlining the optimum solutions available created by industry experts, cities and EU representatives could be the answer?

Chair	Facilitator	Experts / M'Pl ace
Robert Missen	William Goodwin	

Principal Ideas & Outcomes from the Discussion

- It is agreed that low-emissions special vehicles are the future – but the difficulty is the "first step".
- As a "first step" stimulus it is probably more efficient to fund infrastructure (refuelling stations) rather than fund vehicles.
- The transition phase from 100% diesel to 100% clean fuels will be critical – and should be viewed as an opportunity to evaluate all technologies, and not as a means for restricting technologies.

Challenges to overcome to stimulate cross-sector collaboration and scale investment

- The need to spread risk – both for equipment manufacturers and purchasers.
- It is unclear today what the best alternative fuel will be – and may vary according to the type of use of special vehicle.
- Many special vehicles have auxiliary motors to perform ancillary (non-driving) tasks – this needs to be taken into account when considering fuel (and performance).
- Changes in legislation may be needed to facilitate greater use of alternative fuels (e.g. restrictive rules on locations of H^2 filling stations)
- There needs to be better education for key decision makers on what is realistic / feasible / timelines / risks /consequences. Otherwise unrealistic goals may be set.
- Commercial vehicles can reasonably use the same refuelling points as private vehicles, but it is unrealistic for them to share the same recharging points. This needs to be taken into account when developing policy on use of alternative fuels special vehicles.

Practical Next Steps

1. Get three pilot cities for alternative fuels special vehicles.
2. Have the European Commission act as "honest broker" to inform decision makers about alternative fuels.
3. Engage better with the alternative fuel industry to better understand all the issues

Table 6: Deep retrofitting – an immediate need

What initial steps will sow the seeds of real progress for a vast EU asset base in great need, that represents an enormous investment opportunity?

Chair	Facilitator
Paola Rusconi	Dario Colozza

Principal Ideas & Outcomes from the Discussion

- Improving the energy Audit phase, which covers a fundamental role in estimating the saving potential also by standardizing the Audit process
- Need for integration in the Business offering between developers and financers
- Economic viability and long payback period of Deep Retrofit projects
- Government need to provide guarantees of financing and subsidies
- The implementation of Deep Retrofitting projects needs a "step by step" approach

Challenges to overcome to stimulate cross-sector collaboration and scale investment

- Trust and issues from final beneficiaries/users
- To strengthen the governance for multi-property/residential buildings

Practical Next Steps

- Assessment on "Guarantee of Charges" projects (offices and residential buildings, Public Administration to come) - http://www.green-office.fr/en/comment-ca-marche/garantie-des-charges
- Assessment on "Milano sharing cities" for multifamily buildings: the team to work on financiability models - http://sharingcities.wixsite.com/milano
- To promote "Building Renovation Passport" – IBROAD (H2020) - http://bpie.eu/news/h2020-project-ibroad-kicks-off-focusing-on-individual-building-renovation-roadmaps/

Table 7: Positive Energy Blocks (PEB) – the Roadmap

What is the roadmap to PEB? What incentives are required to stimulate innovation? What needs to change in terms of market action, innovation, investment and the like? Where are the stand-out cases/plans that can help lead us forward?

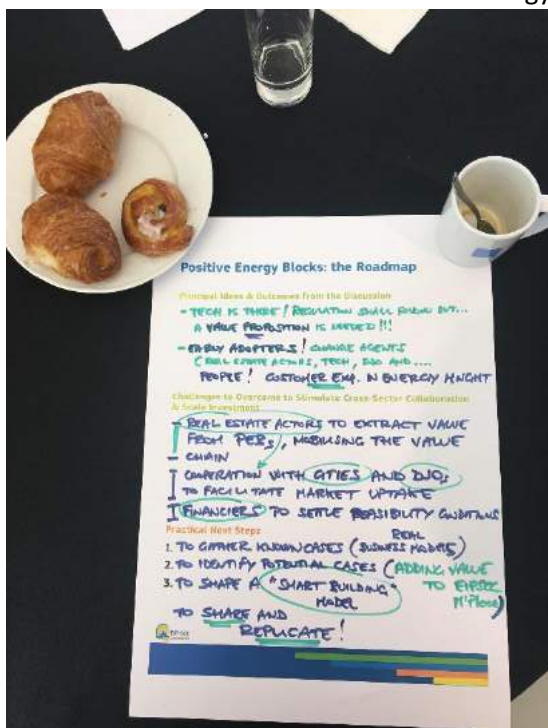| Chair	Facilitator
Francisco Rodriguez	Paolo Gentili

Principal Ideas & Outcomes from the Discussion

- The discussion started from the identification of the technical, regulatory and financial barriers, if any, hampering the replication of experiences shared within the Action Cluster "Sustainable Districts" so far.

- All participants agreed that many technology solutions favouring distributed energy provision and exchanges within neighbouring buildings in a district are there, so that technology does not represent an issue. On the contrary, available energy production solutions (e.g. Building Integrated PV, HVAC) and Internet of Things' appliances are largely available to manage electricity consumption monitoring, real-time exchanges among users, inflow-outflows to/from distribution grids.

- As regards regulation, enabling conditions are not equally spread in EU Member States, due to different positions of Authorities about how to manage DSO/prosumers relationships. In some Member States regulation is already favouring the Positive Energy Blocks model and they shall be looked at for replications. In this context, the **undergoing review of the EPBD Directive** can be an opportunity to foster regulation changes.

- The most important outcome of the discussion is that a **value proposition is needed** and **early adopters/change agents shall be identified** to pave the way to that model, involving:

  o Real estate developers, owners, facility managers

  o Distribution System Operators

  o Technology providers/Integrators

  o Financiers

  o Customers, as the ultimate beneficiaries of such solutions, which shall bring benefits to them -> customers experiences in energy management shall be taken into account to build sound models -> facility of energy use is key.

Challenges to overcome to stimulate cross-sector collaboration and scale investment

- Among others, the questions are

  o "where the PEBs' value can be extracted from?" and

  o "who is best placed to make it?"

- Possible answers are:

o **PEBs' value can be extracted from the increase in land and real estate prices** generated by better energy management (provision, consumption, monitoring, etc..) in a district. Advanced energy solutions are attractive for some buyers, although this can be limited to high-income/educated people. -> the challenge is how to apply such schemes more at large.

o **Real estate developers, owners and facility managers can be in the right position to activate the value chain**, playing a pivotal role in integrating building and energy solutions.

• **Cities and DSO can play a relevant rol**e, allowing investors to develop PEBs through consistent planning and technical support. As an example, planning shall provide special access to e-vehicles, which can be charged in PEBs' instalments, so that construction planning can create synergies with sustainable mobility ones.

• In such a scheme, where value is evident and stakeholders are engaged, **financiers can be attracted**. In some cases, **Green bonds** have been issued to support PEBs developments. Financing can be found through CO2 emissions rights purchased by polluting cars users, as an example.

Practical Next Steps

Participants to the table have agreed on the following next steps:

• Existing experiences shall be identified to map technical, regulatory and financial solutions;

• New cases as potential opportunities for cooperation shall be identified , adding value to the EIP SCC M'Place's works

• A "Smart Building Model" shall be designed and shared -> working plan to be agreed

• Sharing experiences and information is key for any next step.

Table 8: The Humble Lamppost – maximising value from city assets

An obvious city quick win. Best done at scale. How to structure (investor) incentives that promote demand aggregation and innovative new business models. Clear potential thru the SCC01s. What readiness is the market at? What will accelerate things?

Chair	Facilitator	Experts / M'Place
Hans Nouwens	Wim Janssen	John Fox; Anthony Van de Ven

Key Points from the discussion:

The "7-point Action Plan" (drafted in advance):
- Provided good preparation for the discussion.
- Point 8: a missing point is citizen centricity.
- Point 3: No new competitions leads to pilots.

Scale is the magic word.
- All agreed the need for scaling. Blockers are that projects and political interest is fragmented, cities are not the same but a lot of the basics are and citizens are not enough engaged.
- A big blocker is the organization of scale. There is no natural need to scale beyond the own organization. For real scale it is necessary to organize the involvement from all stakeholders.

The Humble Lamppost is part of an infrastructure system.
- The Humble Lamppost is not a solution on itself, except for the lighting part.

Stop LED now! think first!
- Meaning: if the change to LED is made without implementing other functionalities than part of the business case is gone. Adding new functionalities or the preparation for these new functionalities later, will cost much more than combined with changing to LED.

Scale is not only about finance
- Smaller cities need help, they mostly don't have the competences and/or skills to know what to do with Humble Lamppost/Smart City solutions.

Make the reelection message for a politician
- The Humble Lamppost on itself is not something people are getting exited on. How can the Humble Lamppost message be translated to a message a politician wins votes with?

Where are the cities?
- There are not enough cities on the EIP meetings. On this table just 8%. It's good to figure out why and make it worthwhile for cities to be present.

The humble Lamppost serves other programs
- As being a part of the infrastructure for digitizing cities, there is an opportunity in serving other programs where there is a need of digital infrastructure and connectivity.

Worldwide a critical success factors
- Scaling does happen. Two major factors: (i) The city is big enough on itself to organize scale (US, Singapore and the like). (ii) Most important is the local (like Rob van Gijzel mayor of Eindhoven) or national (Angus Taylor, assistant minister for Cities and Digital Transformation Australia) hero with the vision and power for execution.

Organize a 'pavilion' event
> To demonstrate the Humble Lamppost and all its possibilities. Also get all stakeholders involved together on a specific subject to focus and accelerate the process.

Table 9: GDPR – securing data for Smart Cities

Time for action! Multiple (EIP) guidance document are now delivered, >100 MoU/LoI committed organisations; so what's blocking open standard application at scale in EU cities?

Chair	Facilitator	Experts / M'Place
Piero Pellizzaro	Antonio Kung	Roberta Maio

Principal ideas & Outcomes:

- **Challenges in implementing GDPR in Smart Cities:**

Smart Cities agreed on common issues, challenges and risks in the implementation of GDPR provisions. To this end, common practices embedded in a repository of use cases and specific supporting measures could be of relevant support for cities.

- **Importance of GDPR use cases:**

Private companies' use cases, including challenges and solutions to be compliant with GDPR principles, could serve to support Smart Cities to implement Data Protection provisions.

- **Combining privacy and cybersecurity:** given the direct relationship between the technical measures to implement the GDPR and cybersecurity related standards, solutions to overcome silos between the two should be found by a joint effort of Cities and Data Protection Authorities.

- **Proposal for Data Protection Impact Assessment (DPIA) Standards:** based on complex companies' use cases, standards for DPIA can be proposed and tested on cities before the entry into force of the new regulation. They should be built on three pillars, namely technology, legal aspects and processes.

- **Separation between political and operational governance is a common problem across European cities.** Thus, solutions should be found to the challenge resulting from the separation between political and operational governances which exists today when dealing with the digital transformation and with leaders' efforts in helping smart cities to take up with digital revolution

- **Data management in Smart Cities:** data storage, model and monitoring in Smart Cities should respond to common standards. In particular, externalising data could be dangerous from a risk point of view, as for data monitoring, which should be carried out by a certified entity (overcoming the risk of conflict of interest)

Proposed Solutions & Next Steps

1. **Creation of a Use Cases repository**: intended to be a bottom-up exercise, participants at the table will contribute to the effort of bringing together experts in GDPR compliance (from both private and public sector, including data protection authorities) at workshops to be organised

in the next months. Through assessment of real use cases a common repository with challenges and solutions, according to the standards, can be created and proposed as reference at the EU level

2. **Formalise efforts to unlock political and operational disalignment:** a specific action to be proposed under the eGovernment Action Plan (2016-2020) framework
3. **Organisation of workshops:** to find agreement around PIA standards as well as to raise awareness.

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Table 10: Urban Data Platforms

A clear (May '18) requirement and a real risk for cities and service providers to ensure compliance. What steps are required to address this? What value will it deliver for society?

Chair	Facilitator	Experts / M'Pl ace
Thimo Thoye	Claudia de Angelis	Svetoslav Mihaylov Bart De Lathouwer

text.

Table 11: Societal Engagement Tools for Cities

From fragmentation to collaborative application of common tools amongst our cities, in order to get a clean 'demand signal' of real societal needs? What has been produced to date; what is needed to add to it and to exploit the emerging toolkit?

Chair	Facilitator	Experts / M'Pl ace
John Zib	Rozina Spinnoy	Namita Kambli

Key IDEAS & OUTCOMES

The main ideas that emerged from the breakfast discussion revolved around:

1. Scale - Scale refers to the geographic and funding variables that need to be considered for a project. Scale is one the conditions that needs to be defined so as to decide upon the corresponding tools that cities can adopt.

2. Education/advocacy - Education/Advocacy entails the education of politicians and municipal authorities. . The latter in particular need to acknowledge that engaging citizens is critical to the success of a project.

3. Local champions - The need for local champions to act as drivers for connecting communities and city authorities and help both sides understand each other better. . They can be local government, civil, or private sector.

4. Bottom-up catalyst - This point is tied to the idea of exploring a new bottom-up catalyst strategy whereby civic society serves as the starting point to initiate action, which is then complemented by cities.

5. Entry points - Clearly define situations where SET can be used. Bottom-up has an advantage in that it doubles as an entry point from which projects can scale up. Projects that already exist, especially within particular silos, such as energy or mobility, make for ideal entry points.

CHALLENGES TO OVERCOME TO STIMULATE CROSS-SECTOR COLLABORATION & SCALE INVESTMENT

The main challenges that need to be overcome in order to stimulate collaboration are:

1. Egos and personal agendas - It is necessary to put aside egos and personal agendas to work together towards achieving a common goal.

2. Inter- and intra-agency communication – Very often multiple groups in different organisations– and sometimes within the same organisation, –work towards achieving similar objectives with very little or no coordination at all amongst them.

3. Lack of funding for sharing of knowledge - This point is related to the lack of communication and coordination between different agencies. It would, therefore, help if funding and other related tools were made available to share knowledge, especially across different levels.

PRACTICAL NEXT STEPS

From the above points, it follows that the next steps would be to:

1. Create project proposals - Draw up project proposals focused on the two main topics of Urban Mobility and Energy Retrofit as well as create a tool profile related to Participatory Budgeting.

2. **Foster best practice exchange -** Encourage a culture of collaboration in a manner that optimises knowledge sharing thereby allowing cities to learn from one another.

3. **Explore (recommended) alternative funding streams -** Identify alternate funding opportunities, such as cohesion funds in Central-Eastern Europe or COST Action funds, together with recommended sources of funding to move the project forward.

Table 12: Urban EU-China Initiative

Understand the purpose and scope of the EU-China partnership; the opportunities to contextualise European solutions for the Chinese market; how this might link to financing, and facilitate business deals.

Chair	Facilitator	Experts / M'Pl ace
Hans-Martin Neuman	Nikolaos Kontinakis	

text.

Table 13: Packaged solutions for scale replication

Common Solutions for Shared Challenges; & the need for Standards & Interoperability – what can the Lead cities do to 'package' solutions (like 'Lego') for rapid replication? What solutions are ripe for picking? At what (financial) scale? What challenges; what enablers? Which Follower Cities will act fast and first? And how to incentivise early action?

Chair	Facilitator	Experts / M'Pl ace
Nathan Pierce	Alanus von Radicki	

Principal ideas & outcomes from the discussion.

- **Analogy of a supermarket is a good one** – How does a city know what to expect from another measure in the Lighthouse programme? How do we package things in order to make them understandable and accessible to city politicians and officers?
- **Needs driven** - Is there an argument for packaging needs as well as solutions? Cities may be able to identify and express their needs more effectively, after which they can start to shop for solutions. Another way to look at this is the packaging needs to look to the benefits that you create and the functions that they need to fulfil. If we can properly express the need we are resolving this will help to engage politicians and give them a vision of what is possible, crucial to start successful local engagement.
- **Process and journey** - When packaging it shouldn't just be about the product itself, need to include the process and journey that the product took to successful completion. This information is vital to replication.
- **Customer** – Who is the customer? Is this a direct benefit to citizens? Or will this save the council money? Will it benefit the next generation etc.
- **Solutions** - What are the solutions we are talking about? Neutral (abstract) solutions described from smart city use cases. Open, interoperable and replicable
- **Impact** - Systematically consider the impact before implementation- all stakeholders need to acknowledge joint responsibility. In particular, what are unintended consequences, both good and bad, and do measures benefit from being packaged with others
- **Financial benefits** - Aggregate demand through linking (public) procurement of smart solutions across cities
- **Shop window** – how do we display packaged measures? SCIS? BABLE? EIP?

- There needs to be a good approach to **calibrate solutions** to your city e.g. IPI Europe.

Practical next steps?

Step 1: Get lighthouse cities to share their use cases

Step 2: Work with the business model action Cluster and the EIP to standardize solutions and corresponding business models

Step 3: Define process from needs to a tailored local investment (see above)
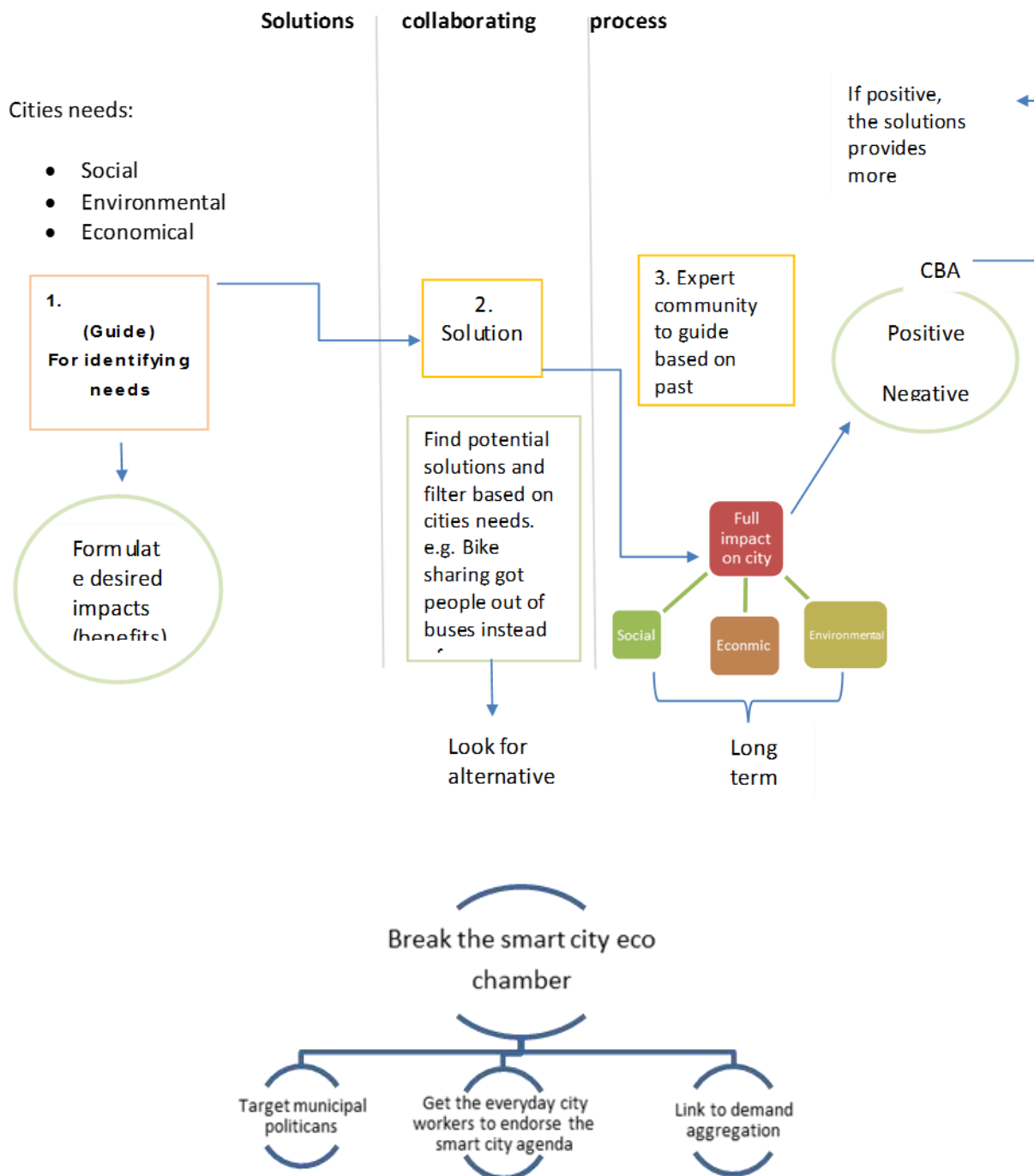
Table 14: The role of Structural Funds to stimulate Blending of Finances

Institutional funds can only go part way to support the scale of transformation that is required. What steps are necessary to stimulate and build confidence by using public finance, particularly EU funds, to build confidence for scale market investment

Chair	Facilitator	Experts / M'Pl ace
Anja de Cunto	Francesco Gargani	Ruska Boyadzhieva Riccardo Honorati Bianchi

text.

Table 15: Building Confidence & Smart City Roadmap

Leadership sponsors, joined-up officers, plans, sufficient funds, the right capacity, community and local businesses all behind it...all vital and non-trivial challenges. However, 40 Follower cities share that same ambition: to develop a compelling Roadmap. What can strengthen the collective response?

Chair	Facilitator	Experts / M'Pl ace
Simona Costa	Georg Huben Fellim O'Connor	Judith Borsboom-van Beurden

Participants: Valeri Bahr; Sebastian Marx; Miimu Airakzanen (VTT); Valerie Bahr (Steinbeis – Europa – Zentrum); Anya Baum (Keryx Group); Silke Cuno (Project Coordinator); Albert Edman (City of Umea); Sebastian Marx (Head of Gothenburg); Mats Jonsson (Sustainable Business Hub)

What are the factors slowing down the market uptake? How can these issues be solved – are there solutions?

➢ The planning is at an early stage while the market uptake is at the very late stage, so they must be considered separately. However, municipalities are not discussing such element since they firstly must fight against each other for their own budget. In setting-up a smart city the finances and the resources are the main barrier that must be faced by municipalities (so the SILO's). The key point is to convince mayors to start projects since they always ask what is the return on investment in setting up a smart city.

➢ One actor that should be considered from the beginning as a target should also be the service provider.

So, to summarize what has been said so far: even before the actual planning starts, the level of political, mayors, but also citizens commitment, becomes central. If the political level gets the support of the citizens it is much easier to reach out companies or whomever is implementing a project. Moreover, every kind of service providers and businesses, either SME's or big companies which are

going to participate need to be innovative, very flexible, and to develop new business models. Of course, the political scene setting can start such projects just if citizens want these developments and this sustainability in policy. It is also important to commit the civil servants.

> Sebastian Marx (Gothenburg): how can we break-down the silo's? there is always the problem of resources and how to obtain and reallocate them. What we have to look for is the cultural point of view, so how to get the culture at the officials level to actually work on innovation and especially smart cities as part of an innovation program. Officials must therefore first understand what is innovation, how to use it, and try to change their mindset accordingly. In order to change the mindset in Gothenburg we usually organize meeting and workshops in order to facilitate the knowledge transfer, whereas the commitment of the mayor is a key element to canalize resources for Smart City uptake and innovation in general.
>
> Another point is the risk-taking: it is always difficult for municipalities, at least in Sweden, to take a lot of risks because it is not their role to invest in high-risk projects on behalf of the citizens. In addition to that, citizens want clean air, kindergartens, so they do not care about a city being smart as long as services are effectively functioning. Hence, it must be explained to them that in order to meet their needs a city has to become smart and why this step is necessary.

> The commitment can stem out from showing to the citizens what are the benefits for them and for the city. That's the way in which commitment is forged.

> Another aspect to be taken into account are the cultural differences between cities. Cities compete, but it is more of a localized competition between neighbouring cities, not between cities of different countries.

What should policy makers do to provide the right preconditions for effective public-private collaboration?

> In the North usually, the Governments take a lot of risks, then there is no need to have the collaboration of a lot of operators because it's all under the umbrella of the local Government.

> Public procurement rules play an important role in promoting public and private participation. In most of the cases, lower cost public procurement companies must be chosen and so, for this reason, is quite difficult to have the innovation uptake. That's why projects on precommercial procurement can support and help innovation. Often public authorities at the local level fight against rules, regulatory aspects. Regulation should be a supporting and not contrasting element for innovation.

> Since last year the European Commission has a new regulation in place about cross-border public procurement.

> The citizens ownership impacts the planning, it is important to communicate correctly to them what municipalities want to do, otherwise this could be the end of the project from the very beginning.

The Guidance package will be finished by the end of this year and will be presented at the next General Assembly. We are looking for cities interested in being testing samples of this guidance package in order to do the last adjustments, and set-up a link between lighthouse and their follower cities or additional cities interested in the Smart City process uptake.

Table 16: The Role of National & Regional Gov't to stimulate market

Member States and Regions play a vital role to establish the enabling conditions for city success: policy and strategy, grant funds, competitions, research programmes, standards, and the like.

Chair	Facilitator	Experts / M'Pl ace
Sointu Räisänen	Antonio Sanchez-Aparicio	Francisco Javier García Vieira Margit Tunnemann

text.

Table 17: Participatory Budgeting for Inclusive Smart Cities and Communities

Participatory budgeting - unexploited potential for Smart Cities, challenges and best practices. Definition of possible scenarios to implement PB in areas such as smart mobility, energy efficiency, waste management and e-government.

Chair	Facilitator	Experts / M'Pl ace
Michelangelo Secchi	Maria Sangiuliano	

Principal Ideas and Outcomes from the Discussion

- Participatory Budgeting as one of the most successful civic engagement and empowerment techniques with clear evidence of its mid-term ROI and high widespread diffusion worldwide
- Available platforms and digital tools (i.e. CAPS H2020 Empatia, Consul and several others) facilitate the process and make it less expensive throughout its consultation, ideation, voting of project's idea and implementation phases
- Despite massive digitalization PB remains a "hybrid process" that mixes in person and online channels of engagement of inhabitants and its delivery require a multi-disciplinary approach
- Potentials to integrate PB with e-government (Transparency/Open Data/co-creation of digital services) and Smart City Policies (focus on vertical areas, i.e. mobility, energy efficiency etc.)

Challenges to Overcome to Stimulate Cross Sectoral Collaboration

- Complex institutional engineering of the PB, to be aligned with administrative procedures and budgetary planning and execution cycles
- Digital Platforms while expanding the potential public of PB introduce new skills-related barriers and gate keepers of the process.
- Embedding of PB into administrative rules and structures to survive political cycles
- Raise awareness of decision makers (providing guidelines, evidence base for R.O.I and estimated costs)
- Inclusivity/diversity objectives to be carefully screened and tackled to avoid replication of existing inequalities
- Provide impact assessment framework to evaluate PB outcomes and inclusiveness

Practical Next Steps

1. Refining an actionable Roadmap for the Initiative (from learning opportunities and tools to city pilots, and MoU with platforms providers)
2. Exploring opportunities for integrating the EIP-SCC PB Initiative and the EU e-Gov Plan
3. Exploring opportunities for twinning cities who share an interest to pilot and to leverage on Regional clusters